# **Section 1. Registration Information**

#### Source Identification

Facility Name: SEMCO SOUTH COOLING Parent Company #1 Name: HILLTOWN PACKING, INC.

Parent Company #2 Name:

### Submission and Acceptance

Submission Type: Re-submission

5-year update (40 CFR 68.190(b)(1)) Subsequent RMP Submission Reason:

Description:

Receipt Date: 05-Aug-2010 Postmark Date: 05-Aug-2010 Next Due Date: 05-Aug-2015 Completeness Check Date: 05-Aug-2010 Yes

Complete RMP:

De-Registration / Closed Reason:

De-Registration / Closed Reason Other Text:

De-Registered / Closed Date:

De-Registered / Closed Effective Date:

Certification Received: Yes

#### **Facility Identification**

EPA Facility Identifier: 1000 0018 7683

Other EPA Systems Facility ID:

#### Dun and Bradstreet Numbers (DUNS)

Facility DUNS:

Parent Company #1 DUNS: Parent Company #2 DUNS:

## **Facility Location Address**

3820 E 36th Street Street 1:

Street 2:

City: Yuma State: **ARIZONA** ZIP: 85365

ZIP4:

County: YUMA

#### Facility Latitude and Longitude

Latitude (decimal): 32.663333 Longitude (decimal): -114.570556

Interpolation - Digital map source (TIGER) Lat/Long Method:

Lat/Long Description: Center of Facility

Horizontal Accuracy Measure: 10

Horizontal Reference Datum Name: World Geodetic System of 1984

Source Map Scale Number:

Owner or Operator

**Operator Name:** Monty Lee Operator Phone: (928) 344-8100

Mailing Address

121 Spreckels Blvd. building #1 Operator Street 1: P.O Box 7696 for mailing Operator Street 2:

Operator City: Spreckels Operator State: **CALIFORNIA** Operator ZIP: 93962

Operator ZIP4:

Operator Foreign State or Province:

Operator Foreign ZIP: Operator Foreign Country:

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person: Mike Azzopardi RMP Title of Person or Position: President

RMP E-mail Address: michael@amcool.us

**Emergency Contact** 

**Emergency Contact Name:** Mike Azzopardi **Emergency Contact Title:** President **Emergency Contact Phone:** (831) 424-1282 Emergency Contact 24-Hour Phone: (831) 262-1648

Emergency Contact Ext. or PIN:

Emergency Contact E-mail Address: michael@amcool.us

Other Points of Contact

Facility or Parent Company E-mail Address: bill@amcool.us Facility Public Contact Phone:

Facility or Parent Company WWW Homepage

Address:

(928) 210-2301

**Local Emergency Planning Committee** 

LEPC: Yuma County LEPC

Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site: 30

FTE Claimed as CBI:

Covered By

OSHA PSM: Yes EPCRA 302: Yes

CAA Title V:

Air Operating Permit ID:

Facility Name: SEMCO SOUTH COOLING

EPA Facility Identifier: 1000 0018 7683 Plan Sequence Number: 1000015157

#### **OSHA** Ranking

OSHA Star or Merit Ranking:

#### Last Safety Inspection

Last Safety Inspection (By an External Agency)

Date:

Last Safety Inspection Performed By an External

Agency:

15-Jan-2010

EPA

#### **Predictive Filing**

Did this RMP involve predictive filing?:

#### **Preparer Information**

Preparer Name: Axiom Engineeers
Preparer Phone: (831) 649-8000
Preparer Street 1: 2511 Garden Road

Preparer Street 2: Preparer City: Preparer State:

Preparer ZIP: Preparer ZIP4:

Preparer Foreign State:
Preparer Foreign Country:
Preparer Foreign ZIP:

2511 Garden Roa

Monterey CALIFORNIA 93940

### Confidential Business Information (CBI)

CBI Claimed:

Substantiation Provided: Unsanitized RMP Provided:

#### Reportable Accidents

Reportable Accidents: See Section 6. Accident History below to determine

if there were any accidents reported for this RMP.

#### **Process Chemicals**

Process ID: 1000019047

Description: Basic Inorganic Chemicals

Process Chemical ID: 1000022651

Program Level: Program Level 3 process
Chemical Name: Ammonia (anhydrous)

CAS Number: 7664-41-7

Quantity (lbs): 24000

CBI Claimed:

Flammable/Toxic: Toxic

### **Process NAICS**

Process ID: 1000019047
Process NAICS ID: 1000019389

Program Level: Program Level 3 process

NAICS Code: 49312

NAICS Description: Refrigerated Warehousing and Storage

# **Section 2. Toxics: Worst Case**

Toxic Worst ID: 1000015117

Percent Weight:

Physical State: Gas liquified by refrigeration

Model Used: Areal Locations of Hazardous Atmospheres

[ALOHA(R)]

Release Duration (mins):10Wind Speed (m/sec):1.5Atmospheric Stability Class:FTopography:Rural

#### Passive Mitigation Considered

Dikes: Enclosures: Berms: Drains: Sumps:

Other Type:

## **Section 3. Toxics: Alternative Release**

Toxic Alter ID: 1000016645

Percent Weight:

Physical State: Gas liquified by refrigeration

Model Used: Areal Locations of Hazardous Atmospheres

[ALOHA(R)]

Wind Speed (m/sec): 7.5
Atmospheric Stability Class: D
Topography: Rural

Passive Mitigation Considered

Dikes:
Enclosures:
Berms:
Drains:
Sumps:
Other Type:

**Active Mitigation Considered** 

Sprinkler System: Yes

Deluge System: Water Curtain: Neutralization: Excess Flow Valve:

Flares: Scrubbers:

Emergency Shutdown: Yes

Other Type:

Facility Name: SEMCO SOUTH COOLING
EPA Facility Identifier: 1000 0018 7683

# **Section 4. Flammables: Worst Case**

No records found.

Plan Sequence Number: 1000015157

# Section 5. Flammables: Alternative Release

No records found.

# **Section 6. Accident History**

Accident History ID: 1000012098

Date of Accident: 20-Nov-2003

Time Accident Began (HHMM): 1508 NAICS Code of Process Involved: 49312

NAICS Description: Refrigerated Warehousing and Storage

Release Duration: 000 Hours 05 Minutes

Release Event

Gas Release: Yes

Liquid Spill/Evaporation:

Fire: Explosion:

Uncontrolled/Runaway Reaction:

Release Source

Storage Vessel:

Piping: Yes

Process Vessel: Transfer Hose:

Valve: Pump: Joint:

Other Release Source:

Weather Conditions at the Time of Event

Wind Speed:

Units: meters/second

Direction: N
Temperature: 70

Atmospheric Stability Class: Precipitation Present:

Unknown Weather Conditions:

**On-Site Impacts** 

Employee or Contractor Deaths: 0
Public Responder Deaths: 0

Public Deaths:

Employee or Contractor Injuries:

0

Public Responder Injuries: 0
Public Injuries: 0

On-Site Property Damage (\$):

**Known Off-Site Impacts** 

Deaths: 0

Hospitalization: 0
Other Medical Treatments: 0
Evacuated: 0

| Facility Name: SEMCO SOUTH COOLING EPA Facility Identifier: 1000 0018 7683 | Plan Sequence Number: 1000015157 |
|--|----------------------------------|
|  | ·                                |
| Sheltered-in-Place:  | 0                                |
| Off-Site Property Damage (\$):   | 0                                |
| Environmental Damage   |                                  |
| Fish or Animal Kills:  |                                  |
| Tree, Lawn, Shrub, or Crop Damage:   |                                  |
| Water Contamination:   |                                  |
| Soil Contamination:  |                                  |
| Other Environmental Damage:  |                                  |
| Initiating Event   |                                  |
|  |                                  |
| Initiating Event:  | Human Error                      |
| Contributing Factors   |                                  |
|  |                                  |
| Equipment Failure:   | V                                |
| Human Error:   | Yes                              |
| Improper Procedures:   |                                  |
| Overpressurization:  |                                  |
| Upset Condition:  By-Pass Condition:                                       |                                  |
| Maintenance Activity/Inactivity:   |                                  |
| Process Design Failure:  |                                  |
| Unsuitable Equipment:  |                                  |
| Unusual Weather Condition:   |                                  |
| Management Error:  |                                  |
| Other Contributing Factor:   |                                  |
| <b>3</b>   |                                  |
| Off-Site Responders Notified   |                                  |
| Off-Site Responders Notified:  | Notified Only                    |
| Changes Introduced as a Result of the Accider                              | nt                               |
| Improved or Upgraded Equipment:  |                                  |
| Revised Maintenance:   |                                  |
| Revised Training:  |                                  |
| Revised Operating Procedures:  |                                  |
| New Process Controls:  |                                  |
| New Mitigation Systems:  |                                  |
| Revised Emergency Response Plan:   |                                  |
| Changed Process:   |                                  |
| Reduced Inventory:   |                                  |
| None:  | Yes                              |
| Other Changes Introduced:  |                                  |
| Confidential Business Information  |                                  |
| CBI Claimed:   |                                  |
| Chemicals in Accident History  |                                  |
| Chambalo III / todaoni i liotory   |                                  |

Facility Name: SEMCO SOUTH COOLING

EPA Facility Identifier: 1000 0018 7683 Plan Sequence Number: 1000015157

Accident Chemical ID: 1000009967

Quantity Released (lbs): 78
Percent Weight: 100.0

Chemical Name: Ammonia (anhydrous)

CAS Number: 7664-41-7 Flammable/Toxic: Toxic

# Section 7. Program Level 3

### Description

The SEMCO South Cooling facility uses anhydrous ammonia as a refrigerant in their cold rroms and process cooling operations. Ammonia is the only regulated chemical used at this facility. SEMCO South maintains a release prevention program to eliminate or minimize releases. The program includes regular inspections, monitoring equipment and logging conditions, scheduled maintenance, and operator training. There is a program to analyze releases for ways to prevent a similar future release.

#### Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID: 1000018780

Chemical Name: Ammonia (anhydrous)

Flammable/Toxic: Toxic CAS Number: 7664-41-7

Prevention Program Level 3 ID: 1000015716 NAICS Code: 49312

## Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):

## Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):

15-Jan-2010

04-Mar-2010

#### The Technique Used

What If: Yes

Checklist:

What If/Checklist:

HAZOP:

Failure Mode and Effects Analysis:

Fault Tree Analysis: Other Technique Used:

PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):

12-Jan-2011

#### Major Hazards Identified

Toxic Release: Yes Fire: Yes Explosion: Yes

Runaway Reaction: Polymerization:

Overpressurization: Yes Corrosion: Yes Overfilling: Yes

Contamination:

**Equipment Failure:** Yes

| -            | e: SEMCO SOUTH COOLING                                 |               | Dian Saguanaa Number: 1000015157 |
|--------------|--|---------------|----------------------------------|
| EPA Facility | Identifier: 1000 0018 7683                             | .,            | Plan Sequence Number: 1000015157 |
|              | Loss of Cooling, Heating, Electricity, Instrument Air: |               |                                  |
|              | Earthquake:  | Yes           |                                  |
|              | Floods (Flood Plain):                                  |               |                                  |
|              | Tornado:   |               |                                  |
|              | Hurricanes:  |               |                                  |
|              | Other Major Hazard Identified:                         |               |                                  |
| Process (    | Controls in Use  |               |                                  |
|              |  |               |                                  |
|              | Vents:   |               |                                  |
|              | Relief Valves:   |               |                                  |
|              | Check Valves:  |               |                                  |
|              | Scrubbers:   |               |                                  |
|              | Flares:  |               |                                  |
|              | Manual Shutoffs:                                       | Yes           |                                  |
|              | Automatic Shutoffs:                                    | Yes           |                                  |
|              | Interlocks:  |               |                                  |
|              | Alarms and Procedures:                                 | Yes           |                                  |
|              | Keyed Bypass:  | -             |                                  |
|              | Emergency Air Supply:                                  |               |                                  |
|              | Emergency Power:                                       |               |                                  |
|              | Backup Pump:   |               |                                  |
|              | Grounding Equipment:                                   |               |                                  |
|              | Inhibitor Addition:                                    |               |                                  |
|              | Rupture Disks:   |               |                                  |
|              | Excess Flow Device:                                    |               |                                  |
|              | Quench System:   |               |                                  |
|              | Purge System:  |               |                                  |
|              | None:  |               |                                  |
|              | Other Process Control in Use:                          |               |                                  |
|              |  |               |                                  |
| Mitigation   | Systems in Use   |               |                                  |
|              |  |               |                                  |
|              | Sprinkler System:                                      | Yes           |                                  |
|              | Dikes:   |               |                                  |
|              | Fire Walls:  |               |                                  |
|              | Blast Walls:   |               |                                  |
|              | Deluge System:   |               |                                  |
|              | Water Curtain:   |               |                                  |
|              | Enclosure:   |               |                                  |
|              | Neutralization:  |               |                                  |
|              | None:  |               |                                  |
|              | Other Mitigation System in Use:                        | diffuser tank |                                  |
| Monitorin    | g/Detection Systems in Use                             |               |                                  |
|              |  |               |                                  |
|              | Process Area Detectors:                                | Yes           |                                  |
|              | Perimeter Monitors:                                    |               |                                  |
|              | None:  |               |                                  |
|              | Other Monitoring/Detection System in Use:              |               |                                  |
| Changes      | Since Last PHA Update                                  |               |                                  |
|              |  |               |                                  |
|              | Reduction in Chemical Inventory:                       |               |                                  |
|              | Increase in Chemical Inventory:                        |               |                                  |

Change Process Parameters: Installation of Process Controls:

Installation of Process Detection Systems: Installation of Perimeter Monitoring Systems:

Installation of Mitigation Systems:

None Recommended:

None: Yes

Other Changes Since Last PHA or PHA Update:

#### **Review of Operating Procedures**

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures): 15-Jan-2010

#### **Training**

Training Revision Date (The date of the most recent 15-Jun-2010 review or revision of training programs):

#### The Type of Training Provided

Classroom: Yes
On the Job: Yes

Other Training:

## The Type of Competency Testing Used

Written Tests: Yes

Oral Tests:

Demonstration: Yes
Observation: Yes

Other Type of Competency Testing Used:

#### Maintenance

Maintenance Procedures Revision Date (The date of 15-Jan-2010 the most recent review or revision of maintenance procedures):

Equipment Inspection Date (The date of the most recent equipment inspection or test): 15-Jan-2010

Equipment Tested (Equipment most recently inspected or tested):

### Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):

Change Management Revision Date (The date of the most recent review or revision of management of change procedures):

#### **Pre-Startup Review**

Pre-Startup Review Date (The date of the most recent pre-startup review):

08-Oct-2009

### **Compliance Audits**

Compliance Audit Date (The date of the most recent 15-Jan-2010 compliance audit):

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):

15-Jan-2011

### Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

#### **Employee Participation Plans**

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):

21-Jul-2010

#### Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most 21-Jul-2010 recent review or revision of hot work permit procedures):

#### **Contractor Safety Procedures**

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):

21-Jul-2010

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):

21-Jul-2010

#### **Confidential Business Information**

CBI Claimed:

Facility Name: SEMCO SOUTH COOLING EPA Facility Identifier: 1000 0018 7683

Plan Sequence Number: 1000015157

# **Section 8. Program Level 2**

# **Section 9. Emergency Response**

## Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?):

Yes

Facility Plan (Does facility have its own written emergency response plan?):

Yes

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):

Yes

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?):

Yes

Healthcare (Does facility's ER plan include information on emergency health care?):

Yes

#### **Emergency Response Review**

Review Date (Date of most recent review or update 15-Jan-2010 of facility's ER plan):

#### **Emergency Response Training**

Training Date (Date of most recent review or update 15-Jan-2010 of facility's employees):

#### **Local Agency**

Agency Name (Name of local agency with which the Yuma County LEPC facility ER plan or response activities are coordinated):

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated):

(928) 373-4861

### Subject to

OSHA Regulations at 29 CFR 1910.38: Yes
OSHA Regulations at 29 CFR 1910.120: Yes

Clean Water Regulations at 40 CFR 112:

RCRA Regulations at CFR 264, 265, and 279.52: OPA 90 Regulations at 40 CFR 112, 33 CFR 154,

49 CFR 194, or 30 CFR 254: State EPCRA Rules or Laws:

Other (Specify): OSHA 29 CFR 1910.119

## **Executive Summary**

The SEMCO South Cooling Facility is located at 3820 E. 36th Street, Yuma, Arizona. The facility handles Anhydrous Ammonia, CAS 7664-41-7, which is listed as Federal Regulated Substance in quantities greater than the Federal Threshold Quantities. This facility is required to comply with Program 3 requirements since it exceeds the federal threshold level of 10,000lbs. and public receptors are located within the worst-case accidental release toxic end point area. The total quantity of ammonia currently at the site is approximately 24,000 lbs.

#### RELEASE PREVENTION AND EMERGENCY RESPONSE POLICY

SEMCO South Cooling utilizes inspection procedures to review refrigeration equipment prior to startup and during operations. These procedures identify potential sources of release and equipment corrections required to prevent these releases. Onsite personnel and certified refrigeration contractors review the equipment, as required.

Onsite personnel provide initial emergency response. Onsite personnel will make a preliminary assessment in the event of a release and will provide first response. First response may include emergency equipment shutdown, system isolation, or controlled operation such as pump down to prevent or reduce an off-site release. No emergency operations will be performed that are beyond the capabilities of the operators or other onsite personnel. Local fire and police departments with mutual aide response will provide emergency response for a major release event. The refrigeration contractor would also be on-call to provide emergency response. Emergency response training will be conducted yearly for current employees and as required for new employees. Records will be kept of all training performed at the site for a minimum of five (5) years.

#### DESCRIPTION OF SOURCE AND SUBSTANCE HANDLED

SEMCO South Cooling utilizes anhydrous ammonia in their precooling and cold storage operations. Fresh produce is brought from the fields and cooled to remove field heat. The produce is then stored in a cold storage warehouse.

All refrigeration equipment is tied together to form a single common system. This equipment consists of portable and permanently installed equipment. The refrigeration system configuration includes three compressor skids, a tower-frame evaporative cooling condenser and high-pressure receiver, a low-pressure receiver with pumps, a Self Contained Automatic Transfer (SCAT) ice machine, an ice maker, one half-car vacuum tube, one full-car vacuum tube, a refrigeration trailer, cold room evaporators, and safety equipment, including a refrigerant discharge diffusion tank.

The system is operated in full configuration during the growing season from November to April. Operations may continue at a reduced level in the off-season.

Anhydrous ammonia (NH3) is a gas in its natural state and is extremely irritating to mucous membranes and lung tissue. The gas is pungent and may be suffocating as shortness of breath and labored breathing can develop if inhaled. Prolonged inhalation of high concentrations may cause bronchitis and/ or pneumonia, with some residual reduction in pulmonary functions. Repeated or prolonged contact of high concentrations of ammonia to the skin can cause frostbite, redness, pain and serious skin burn.

#### ACCIDENTAL RELEASE PREVENTION PROGRAM

SEMCO South maintains a release prevention program to eliminate or minimize releases. The program includes regular inspections, monitoring equipment and logging conditions, scheduled maintenance, and operator training. There is a program to analyze releases for ways to prevent a similar future release.

The ammonia refrigeration system has specific safety procedures to prevent a release. Operators and mechanics are trained for safe operation and maintenance of the refrigeration system. They are also trained in emergency response procedures in the event of an ammonia release. There are emergency shut off switches for shutting down the system. An alarm and detection system monitors the facility cold rooms for unsafe ammonia concentration levels and for operating conditions outside of safety set points. There is an emergency control box for manual pressure release. Preventive maintenance and safety inspections are used to insure equipment and piping is maintained and operating in a safe manner.

#### FIVE-YEAR ACCIDENT HISTORY

According to SEMCO South Cooling Personnel, since startup there has been one release of anhydrous ammonia. The quantity of release was below the reportable threshold and no injuries resulted, however it was reported to the appropriate authorities.

#### **EMERGENCY RESPONSE PROGRAM**

SEMCO South Cooling is in the process of writing a Business Response Plan. Upon completion, this plan will provide emergency contact personnel information, general emergency response procedures, hazardous material release reporting procedures, chemical inventory information, and emergency evacuation procedures.

In event of a release, certain personnel are designated to determine the potential hazard and coordinate response procedures. The

emergency coordinator is responsible for contacting emergency response agencies, schools, daycare centers, and acute care facilities that may be affected by the release. The coordinator will also be responsible for evacuation of employees if necessary, and for coordination with community emergency responders if off-site evacuations are required.

#### PLANNED SAFETY IMPROVEMENTS

Additional risk reduction measures may be implemented to further reduce the potential for an accidental release. These measures may include installation of upgraded piping and equipment supports, installation of equipment labeling, and implementation of program aimed specifically at the maintenance, training, and emergency response procedures for the ammonia based refrigeration equipment.